Pest Biology and Management
Break Out Session

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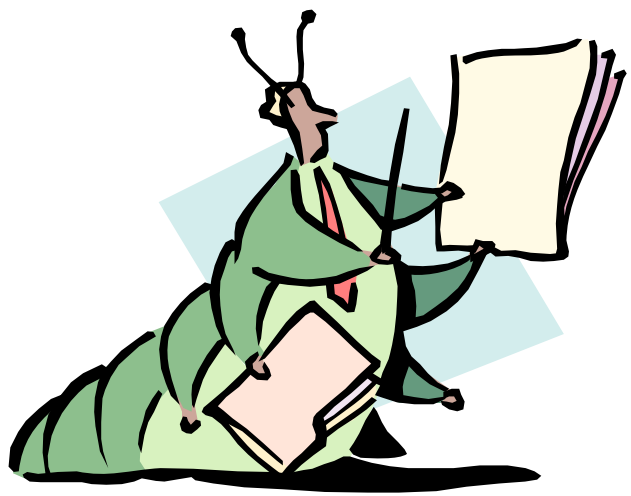
Arthropod and Nematode Biology and Management Program Area:

10 Year Goals

- Biotic and abiotic factors affecting establishment and spread of species
- Framework for environmentally sound pest control

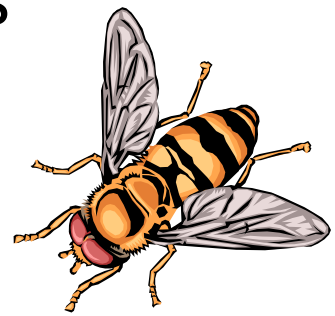


Significant Changes for FY 2007

Organization of programs in RFA :

One overall program area –"Arthropod and Nematode Biology and Management" and 3 "program elements":

51.2A Organismal and Population Biology
51.2B Suborganismal Biology
51.2C Tools, Resources and Genomics

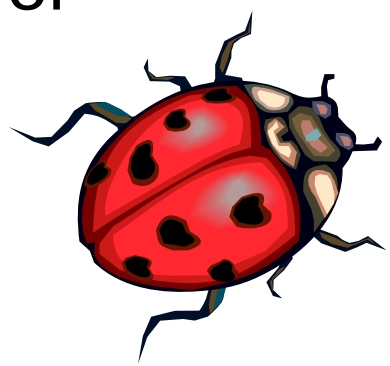


Program Element 1:

51.2 A Organismal and Population Biology of Arthropods and Nematodes

Priorities

- Mechanisms affecting abundance of pests and beneficial species
- Organismal and population-level studies
- Ecological interactions with diseases or disorders



Funding Statistics

2006 panel: Organismal and Population Biology of A&N

No. proposals submitted: 94

No. awarded: 20

Percent success: 22% (standard)

Average **standard** award size: $343,364

Duration (years): 2-4 years

Budget: $5.8 Million

Program Element 2:
51.2 B Suborganismal Biology

Priorities

- Characterization at cellular, molecular level of biological processes
- Interactions with associated agriculturally relevant organisms (e.g., plants, animals, microbes)
- Mechanism of action of control tactics

Funding Statistics

2006 panel: Suborganismal Biology of A&N

No. proposals submitted: 66

No. awarded: 13

Percent success: 16% (standard)

Average **standard** award size: $354,500

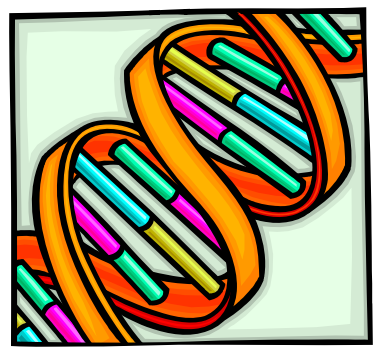
Duration (years): 2-4 years

Budget: $3.6 Million

Program Element 3:
51.2 C Tools, Resources, Genomics

Priorities

- Studies to facilitate future whole genome sequencing and hypothesis testing
- Tools to decipher sequence information (for arthropods and nematodes with partially completed or fully sequenced genome)
- Characterize functions of genes (for arthropods and nematodes with partially completed or fully sequenced genome)



Funding Statistics
2006 panel: Genomics of A&N

No. proposals submitted: 25

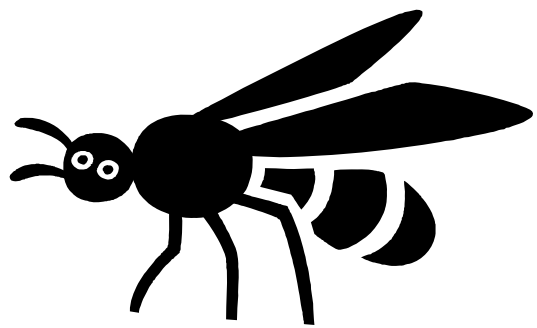
No. awarded: 6

Percent success: 21% (standard)

Average standard award size: $441,000

Duration (years): 2-4 years

Budget: $3.1 Million



Special Research Grant – Pest Management Alternatives

National Program Leader: Monte Johnson
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ProgramGoals/Priorities – FY 2007

- Research – Development and implementation of pest management systems when regulatory action or voluntary cancellation has resulted in unavailability of essential pest control tactics.
- Outreach components are critical.
- About $1.3 million available in FY 2006.

Special Research Grant – Pest Management Alternatives Program Changes for FY 2007

- The RFA will include updated regional priorities and the panel process includes a relevancy review by the four regional Integrated Pest Management Centers.

- Applications will be electronic

Special Research Grant – Pest Management Alternatives Program Statistics – FY 2006

- 35 Proposals Submitted
- 9 Proposals Awarded
- 25.7 % Success
- $144,000 Average Award Size
- Average Award Duration – 2 years

Crops at Risk & Risk Avoidance and Mitigation Programs

The IPM Section 406 Program seeks to solve critical agricultural issues, priorities, or problems through the integration of research, education, and extension activities. The Program is designed to fund the development of new integrated pest management (IPM) approaches or the improvement of existing IPM systems.

The program areas are:

- Crops at Risk; and
- Risk Avoidance and Mitigation

Crops at Risk (CAR)

Rick Meyer, National Program Leader

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Program Goals/Priorities – FY 2006

- Development and implementation of innovative, ecologically-based, sustainable IPM systems, preferably involving a diversity of tactics for specific food or fiber crops. (pre- or post-harvest system(s)

Crops at Risk

- Program emphasis is on integrated and multifunctional or multidisciplinary research, education, and extension projects

- Primary emphasis of the proposal should be on productivity and profitability while addressing critical environmental quality and human health issues for crops or cropping systems at risk from implementation of the Food Quality Protection Act and other related regulatory actions

Crops at Risk
Funding Statistics – FY 2006

- 23 proposals submitted
- 3 Proposals funded
- 13% Success Rate
- Average award $433,000
- Average duration 3 years

Risk Avoidance and Mitigation Program (RAMP)

Bob Nowierski, National Program Leader
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Goal: To enhance development and implementation of innovative, ecologically-based, sustainable IPM systems.

- Projects should involve multiple crop food and fiber production systems, an area-wide or landscape-scale agroecosystem, or a documented pesticide impact on water or human or environmental health

- Relevant systems: major acreage agricultural production systems, high value crops or other agroecosystems

- Emphasis should be on productivity and profitability, while addressing critical environmental quality and human health issues
- Intent is to fund long-term projects that emphasize a systems approach
- Applications should be multi-state/regional in scale or show relevance beyond an individual state

Risk and Mitigation Program Funding Statistics – FY 2005

- 18 proposals submitted
- 4 proposals funded
- 22% success rate
- Average award $350,000
- Average duration 4 years

Integrated Organic Program

Thomas Bewick, National Program Leader
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202-401-3356

The Integrated Organic Program seeks to solve critical organic agriculture issues, priorities, or problems through the integration of research, education, and extension activities in **two program areas**.

1) Organic Transitions Program (ORG)

ORG funds the development and implementation of research, extension, and higher education programs to improve the competitiveness of organic producers and producers who are adopting organic practices.

2) Organic Agriculture Research and Extension Initiative (OREI)

OREI funds research and extension programs that enhance the ability of producers and processors who have already adopted organic standards to grow and market high quality organic agricultural products.

Goals/Priorities – FY 2006

- Improved programs for crop and animal health using a systems approach
- Relationship of applied organic fertility management to crop health and resistance to pests
- Develop and demonstrate education and training for county Extension and other information providers regarding organic practices
- Improve organic production, breeding, and processing
- Evaluate economic benefits for those who use organic methods
- Explore international trade opportunities
- Conduct advanced, long-term, on-farm research

Program Statistics – FY 2005

- 82 Proposals Submitted
- 8 Proposals Awarded
- 10 % Success Rate
- Average Award Size = $583,750
- Average Award Duration = 3 years